

IN THE CLAIMS

1. (Currently Amended) A printing method comprising:
providing a substrate having a surface coated with a film coating comprising between at least 25% and 50% nano-silica by weight in a polymeric binder; and
printing on the coated surface with a liquid toner comprising pigmented polymer particles and a carrier liquid.
2. (Currently Amended) A printing method according to claim 1 wherein the ~~coating~~ polymeric binder comprises an acrylic material.
3. (Original) A printing method according to claim 2 wherein the acrylic material comprises a cross-linked polyacrylic ester.
4. (Previously Presented) A printing method according to claim 1 wherein the coating is UV cured.
5. (Cancelled).
6. (Currently amended) A printing method according to claim ~~5~~ 1 wherein the coating comprises at least 35% silica.
7. (Original) A printing method according to claim 6 wherein the coating comprises at least 40% silica.
8. (Original) A printing method according to claim 7 wherein the coating comprises at least 45% silica.
9. (Cancelled).
10. (Previously Presented) A printing method according to claim 1 wherein the silica has a size of between 5 and 50 nanometers.
11. (Cancelled).

UDX A04

12. (Currently amended) A printing method according to claim ~~11~~ 10 wherein the silica has a size of between 10 and 20 nanometers.

13-15. (Cancelled).

16. (Previously Presented) A printing method according to claim 1 wherein the coating further comprises an anchorage agent.

17. (Original) A printing method according to claim 16 wherein the anchorage agent comprises an amine material.

18-20. (Cancelled)

21. (Currently Amended) A printing method according to claim ~~18~~ 17 wherein the substance is poly(propylene oxide).

22. (Currently Amended) A printing method according to claim ~~18~~ 17 wherein the substance is poly-oxyethelene.

23. (Previously Presented) A printing method according to claim 1 wherein the substrate and the pigmented particles are both acidic.

24. (Previously Presented) A printing method according to claim 1 wherein the substrate is coated with a polyamide coating between the coating containing silica and the substrate.

25. (Canceled)

26. (Previously Presented) A printing method according to claim 1 wherein the material of the substrate is chosen from the group consisting of PET, PVC and polycarbonate.

27. (Canceled)

28. (Previously Presented) A printing method according to claim 1 wherein the coating forms a substantially smooth surface.

29. (Previously Presented) A printing method according to claim 1 wherein the substrate is a sheet of material.

30. (Previously Presented) A printing method according to claim 1 wherein the substrate is a disk.

31. (Previously Presented) A printing method according to claim 1 wherein the surface of the coating is continuous.

32. (Cancelled)

33. (Currently Amended) A substrate comprising:

a sheet of polymer; and

a printable coating in the form of a film, on the polymer sheet comprising ~~at least 25%~~
between 29% and 50% nano-silica by weight of total solids in a polymeric binder.

34. (Currently amended) A coated substrate according to claim 33 wherein the coating polymeric binder comprises an acrylic material.

35. (Original) A coated substrate according to claim 34 wherein the acrylic material comprises a cross-linked polyacrylic ester.

36. (Previously Presented) A coated substrate according to claim 33 wherein the coating is UV cured.

37. (Cancelled)

38. (Currently Amended) A coated substrate according to claim ~~37~~ 33 wherein the coating comprises at least 35% silica.

39. (Original) A coated substrate according to claim 38 wherein the coating comprises at least 40% silica.

UDX A04

40. (Original) A coated substrate according to claim 39 wherein the coating comprises at least 45% silica.

41. (Cancelled)

42. (Previously Presented) A coated substrate according to claim 33 wherein the silica has a size of between 5 and 50 nanometers.

43. (Original) A coated substrate according to claim 42 wherein the silica has a size of between 10 and 40 nanometers.

44-47. (Cancelled)

48. (Previously Presented) A coated substrate according to claim 33 wherein the coating further comprises an anchorage agent.

49. (Original) A coated substrate according to claim 48 wherein the anchorage agent comprises an amine material.

50. (Original) A coated substrate according to claim 49 wherein the amine material comprises a diamine terminated substance.

51. (Original) A coated substrate according to claim 49 wherein the amine material comprises a monoamine terminated substance.

52. (Original) A coated substrate according to claim 49 wherein the amine material comprises a triamine terminated substance.

53. (Previously presented) A coated substrate according to claim 50 wherein the substance is poly(propylene oxide).

54. (Currently Amended) A ~~printing method coated substrate~~ according to claim 50 wherein the substance is poly-oxyethelene.

55. (Previously Presented) A coated substrate according to claim 33 wherein the substrate is acidic.

56. (Previously Presented) A coated substrate according to claim 33 wherein the substrate is coated with a polyamide coating between the coating containing silica and the sheet.

57. (Previously Presented) A coated substrate according to claim 33 wherein the material of the sheet is chosen from the group consisting of PVC, PET and polycarbonate.

58 – 59. (Canceled)

60. (Previously Presented) A coated substrate according to claim 33 wherein the coating is smooth.

61. (Previously Presented) A printing method according to claim 29 wherein the sheet is flexible.

62. (Previously Presented) A printing method according to claim 61 wherein the resultant print on the sheet is a transparency.

63. (Currently Amended) A ~~coated substrate~~ printing method according to claim 29 wherein the sheet is flexible.

64. (Currently Amended) A ~~coated substrate~~ printing method according to claim 63 wherein the substrate is a transparency.

65. (New) A printing method comprising:

providing a substrate having a surface coated with a film coating comprising between 25% and 50% nano-silica by weight in a film formed of a polymeric binder; and

printing on the coated surface with a liquid toner comprising pigmented polymer particles and a carrier liquid.

66. (New) A printing method according to claim 65 wherein the polymeric binder comprises an acrylic material.

67. (New) A printing method according to claim 66 wherein the acrylic material comprises a cross-linked polyacrylic ester.

68. (New) A printing method according to claim 65 wherein the coating is UV cured.
69. (New) A printing method according to claim 65 wherein the coating comprises at least 35% silica.
70. (New) A printing method according to claim 69 wherein the coating comprises at least 40% silica.
71. (New) A printing method according to claim 70 wherein the coating comprises at least 45% silica.
72. (New) A printing method according to claim 65 wherein the silica has a size of between 5 and 50 nanometers.
73. (New) A printing method according to claim 72 wherein the silica has a size of between 10 and 20 nanometers.
74. (New) A printing method according to claim 65 wherein the coating further comprises an anchorage agent.
75. (New) A printing method according to claim 74 wherein the anchorage agent comprises an amine material.
76. (New) A printing method according to claim 75 wherein the substance is poly(propylene oxide).
77. (New) A printing method according to claim 75 wherein the substance is poly-oxyethelene.
78. (New) A printing method according to claim 65 wherein the substrate is coated with a polyamide coating between the coating containing silica and the substrate.
79. (New) A printing method according to claim 65 wherein the material of the substrate is chosen from the group consisting of PET, PVC and polycarbonate.

UDX A04

80. (New) A printing method according to claim 65 wherein the substrate is a sheet of material.
81. (New) A printing method according to claim 65 wherein the coating is smooth.
82. (New) A substrate comprising:
a sheet of polymer; and
a printable coating in the form of a film, on the polymer sheet comprising between 25% and 50% nano-silica by weight of total solids in a film of a polymeric binder.
83. (New) A coated substrate according to claim 82 wherein the polymeric binder comprises an acrylic material.
84. (New) A coated substrate according to claim 83 wherein the acrylic material comprises a cross-linked polyacrylic ester.
85. (New) A coated substrate according to claim 82 wherein the coating contains at least 30% silica.
86. (New) A coated substrate according to claim 85 wherein the coating comprises at least 35% silica.
87. (New) A coated substrate according to claim 86 wherein the coating comprises at least 40% silica.
88. (New) A coated substrate according to claim 87 wherein the coating comprises at least 45% silica.
89. (New) A coated substrate according to claim 82 wherein the silica has a size of between 5 and 50 nanometers.
90. (New) A coated substrate according to claim 89 wherein the silica has a size of between 10 and 20 nanometers.
91. (New) A coated substrate according to claim 82 wherein the silica is not chemically bound to the rest of the coating.

UDX A04

92. (New) A coated substrate according to claim 82 wherein the silica is chemically bound to the rest of the coating.

93. (New) A coated substrate according to claim 82 wherein the material of the sheet is chosen from the group consisting of PVC, PET and polycarbonate.